

**ABSTRACT**

A signal processing system is well suited for conditioning a speech signal prior to coding the speech signal to achieve enhanced perceptual quality of 5 reproduced speech. The signal processing system may be incorporated into mobile or portable wireless communications devices, wireless infrastructure equipment, or both. The signal processing system includes a filtering arrangement for filtering an input speech signal to make a spectral response of the speech signal more uniform to compensate for spectral variations that might otherwise be imparted into the speech 10 signal by a communications network associated with the signal processing system.